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**Countryman et al.**

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- (54) **VAPE PEN KICK STAND**
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- (51) **Int. Cl.**  
*A24F 9/14* (2006.01)  
*A24F 40/10* (2020.01)  
*F16M 11/38* (2006.01)
- (52) **U.S. Cl.**  
CPC ..... *A24F 9/14* (2013.01); *A24F 40/10* (2020.01); *F16M 11/38* (2013.01); *F16M 2200/08* (2013.01)

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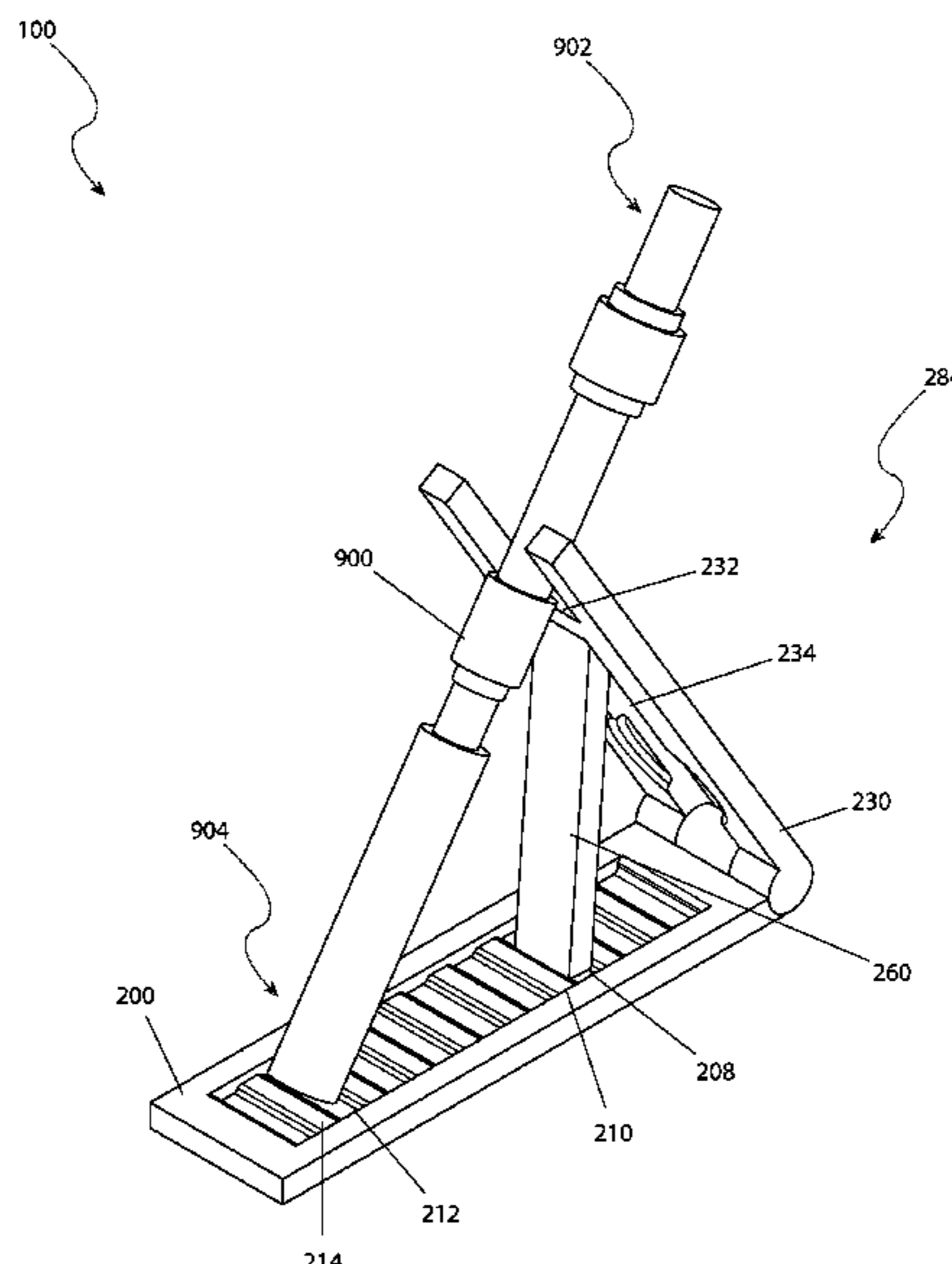
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- (58) **Field of Classification Search**  
CPC ..... *A24F 9/14*; *A24F 40/10*; *F16M 11/38*; *F16M 2200/08*  
See application file for complete search history.

(57) **ABSTRACT**  
The present invention is directed to a vape pen kickstand. The vape pen kickstand may comprise a base, a pen support, a first hinge, a kickstand leg, and a second hinge. The vape pen kickstand may be a folding stand for a vaping pen to rest upon when the vaping pen is not being held. The vape pen kickstand may be unfolded to a fully unfolded configuration to hold the vaping pen in an upright orientation such that vaping oil is prevented from leaking out of the vaping pen. The vape pen kickstand may fold flat when not in use such that the vape pen kickstand may be easily transported in a pocket or purse.

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**20 Claims, 6 Drawing Sheets**



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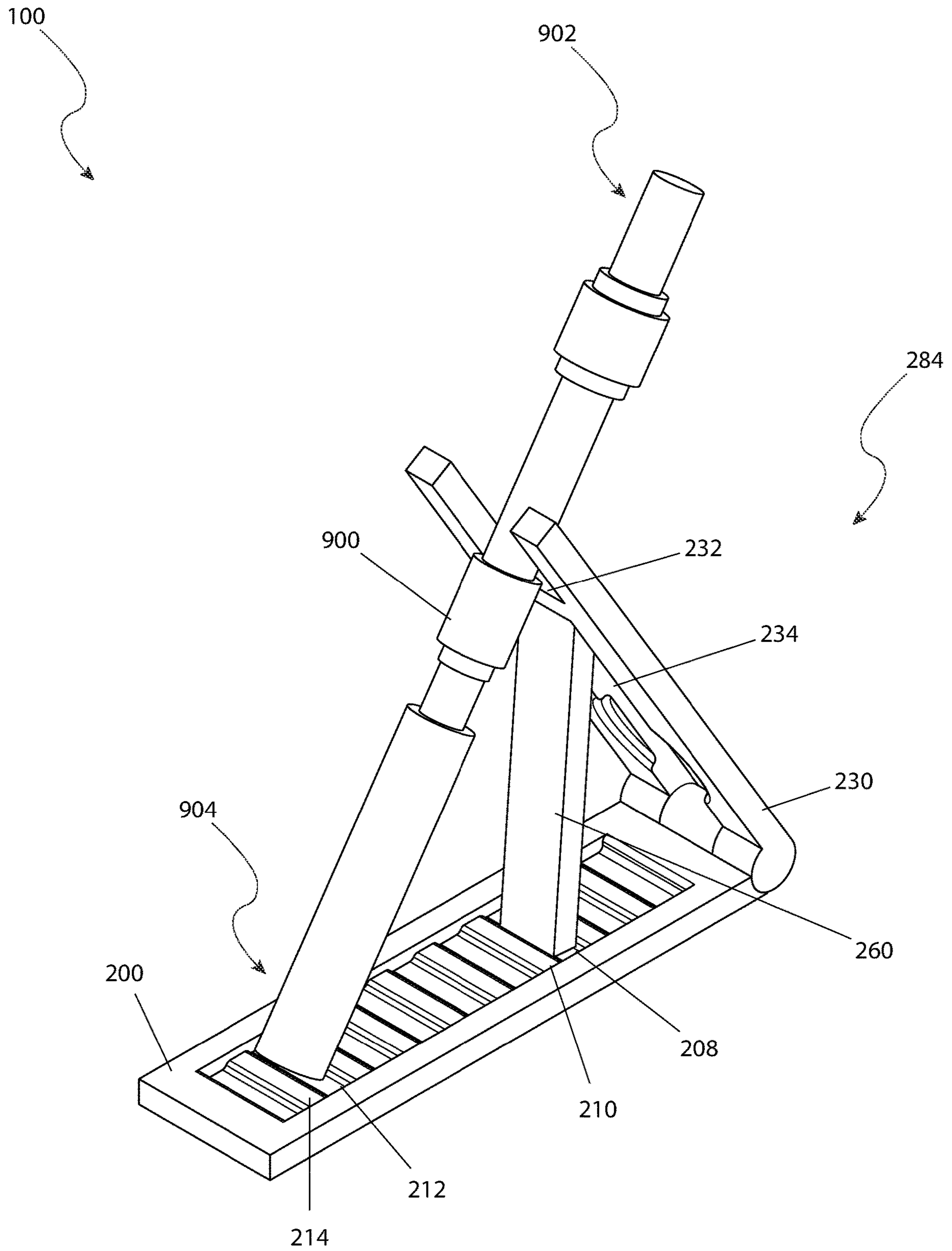


FIG. 1

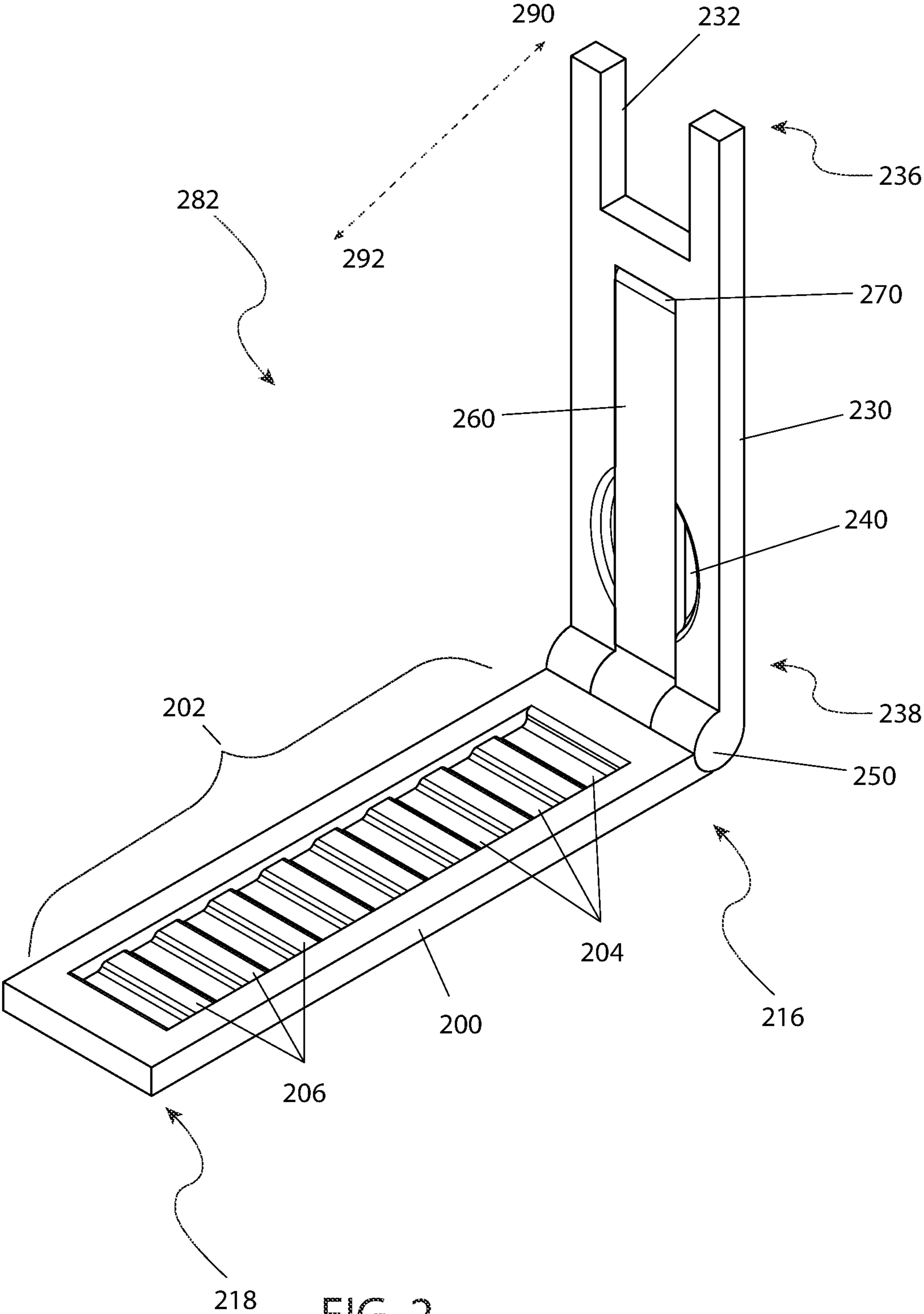


FIG. 2

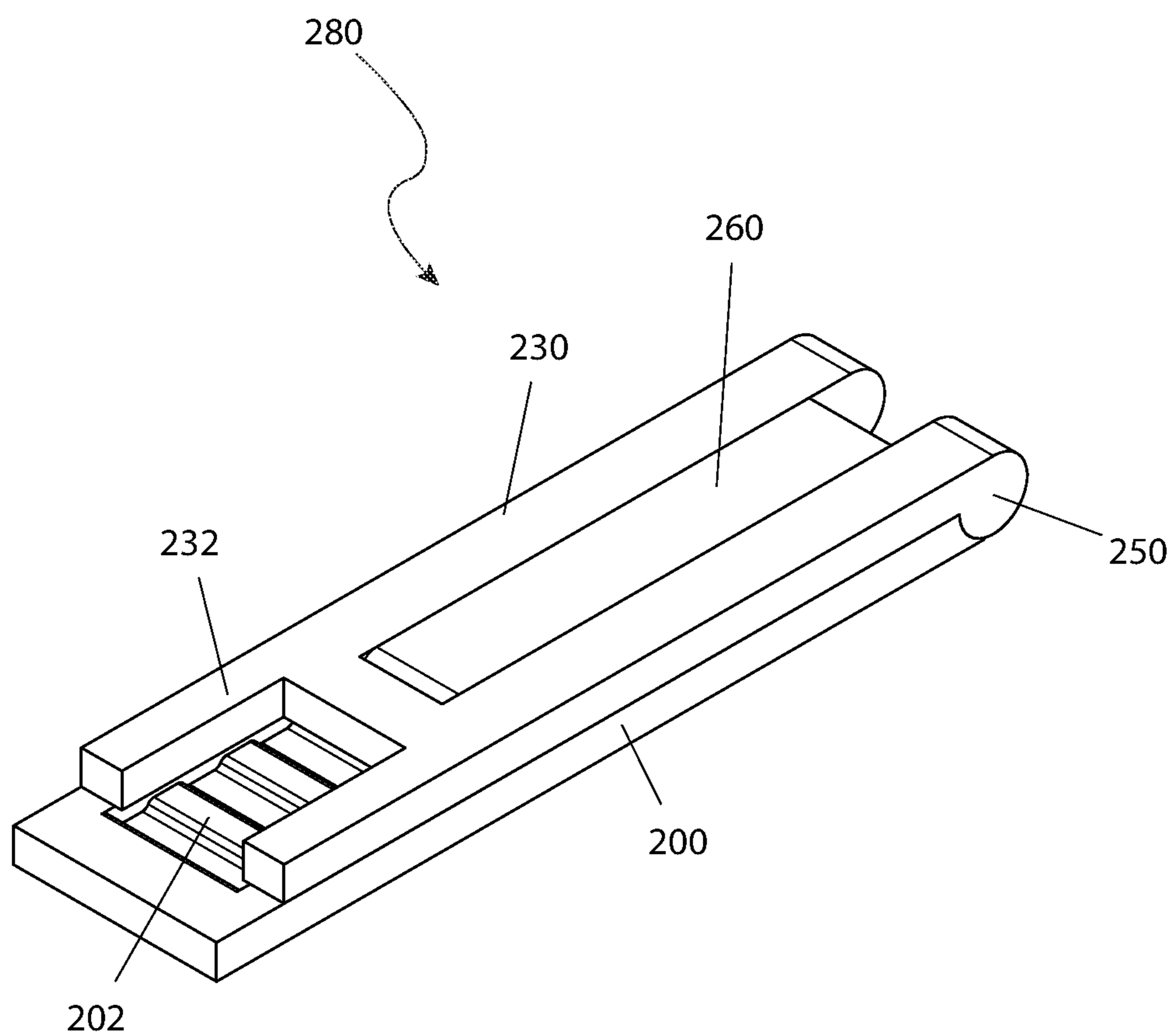


FIG. 3

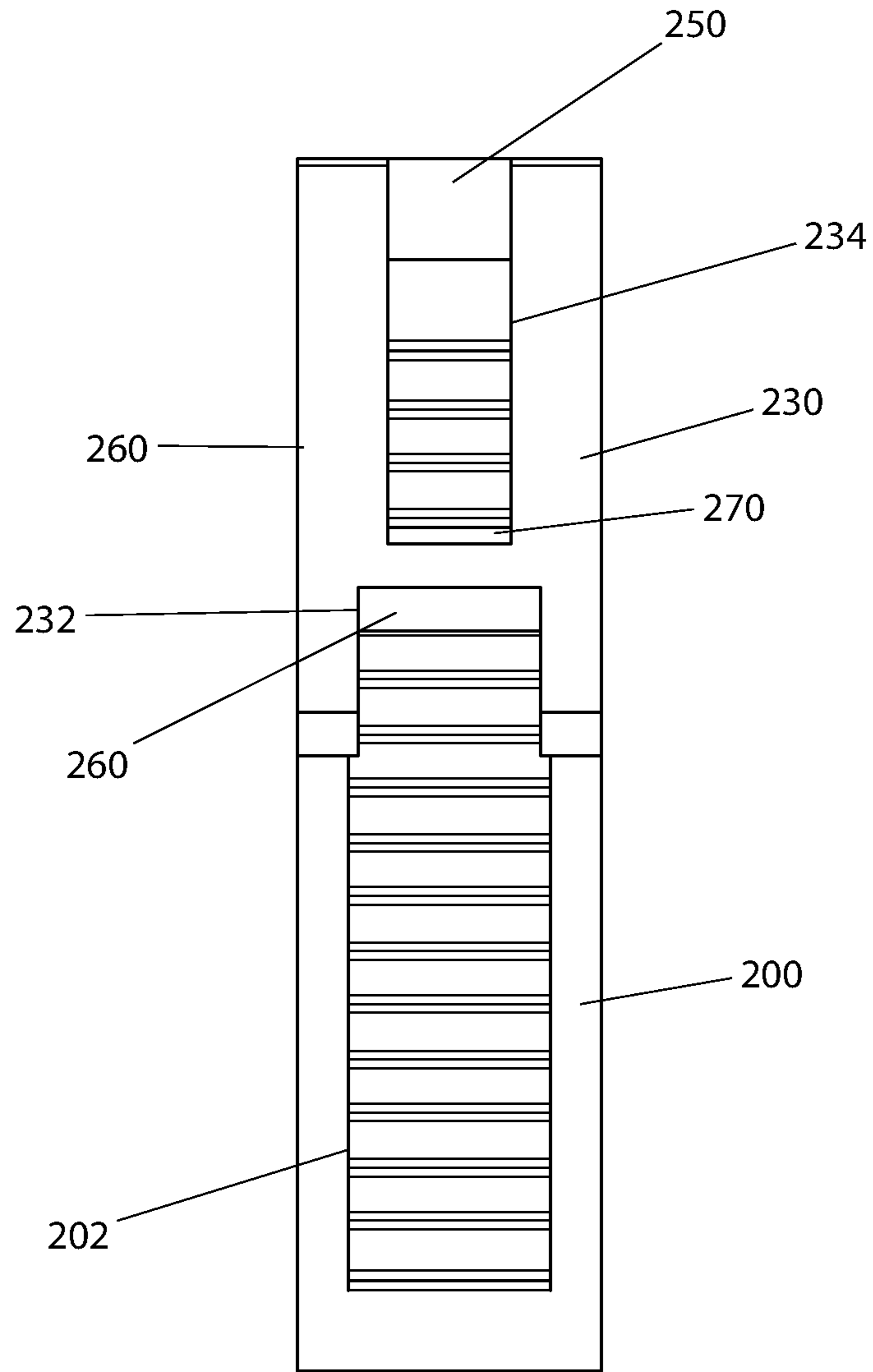


FIG. 4

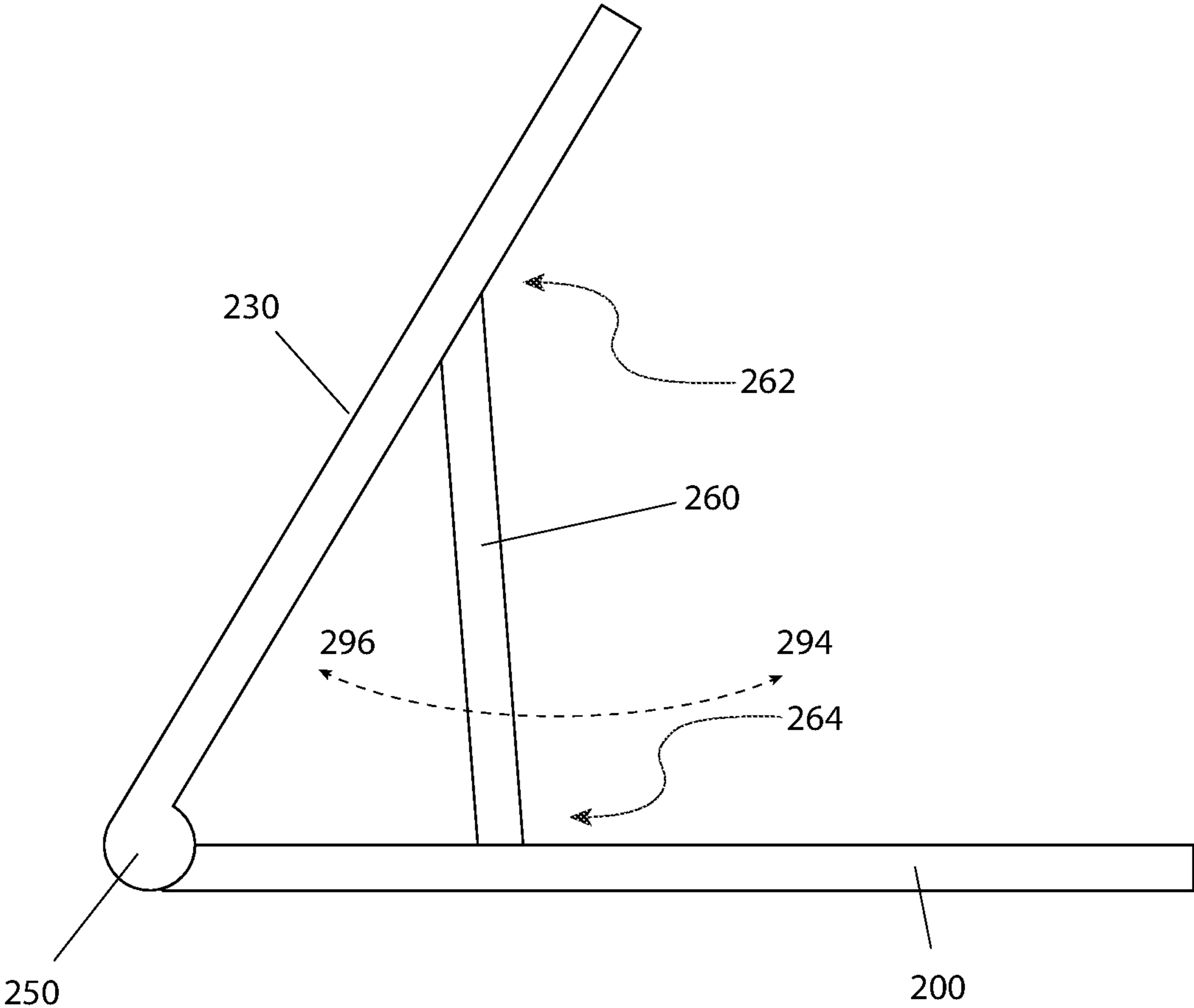


FIG. 5

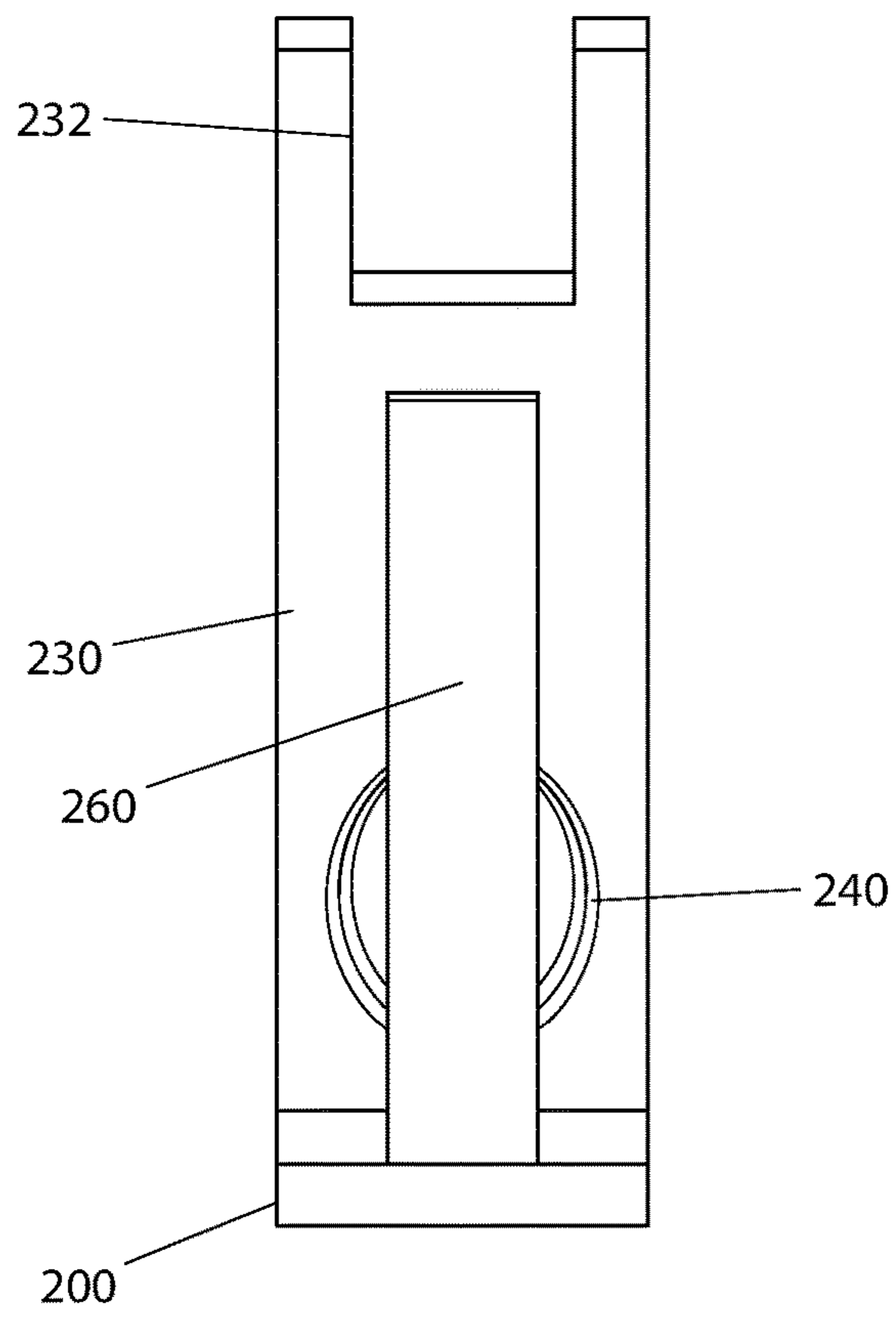


FIG. 6

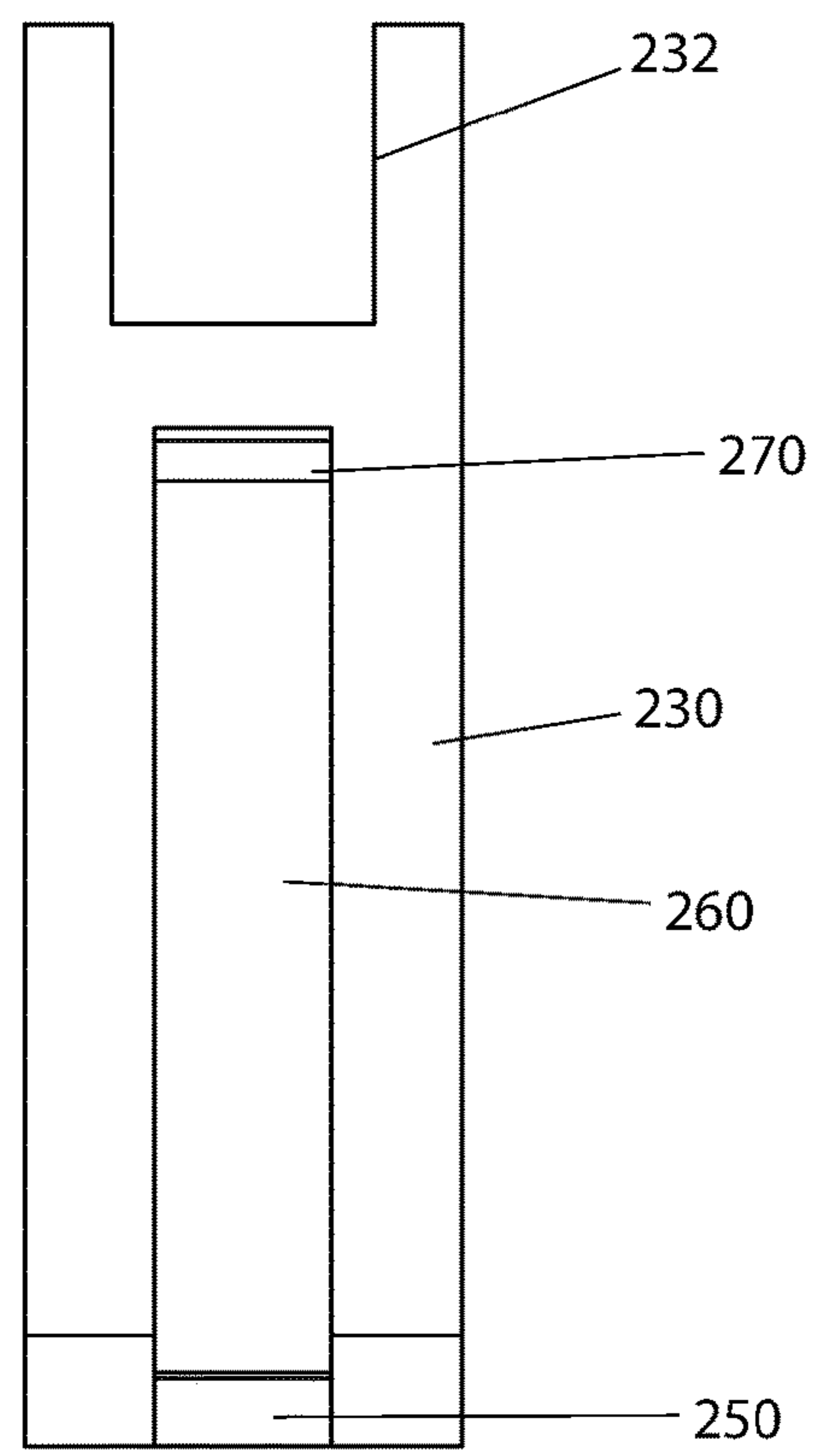


FIG. 7



**1****VAPE PEN KICK STAND**

## RELATED APPLICATIONS

None.

## FIELD OF THE INVENTION

The present invention relates generally to a kick stand and more specifically to a kick stand for a vape pen.

## BACKGROUND OF THE INVENTION

The usage of vaporizer pens or “vapes” has exploded over the last few years. The promise of safe, harmless nicotine delivery without all the carcinogenic byproducts of standard cigarettes is hard to pass up for many. They are also an alternative to conventional cigarettes and may aid individuals in breaking the cigarette habit. All of these products rely on the use of reusable pen with a fixed mouthpiece. They present no dangers of second-hand smoke to others as well.

However, since such pens rely on “vape oil” as their medium, such oil has a tendency to run out of the pen when placed on a horizontal surface when not being actively used. This not only results in wasted costly oil, but a messy cleanup as well. Accordingly, there exists a need for a means by which a vape pen can be effectively held when not being actively used to prevent to the loss of vape oil. The development of the vape pen kick stand fulfills this need.

## SUMMARY OF THE INVENTION

To achieve the above and other objectives, the present invention provides for a vape pen kickstand which has a base having a first end and a generally rectangular armature that forms a vape pen kickstand bottom, a pen support elevating a mouthpiece end of the vaping pen when the pen support is pivoted upwards away from the base, a leg cutout which has an aperture on the second end of the pen support such that the kickstand leg pivots into the leg cutout when the vape pen kickstand is in a fully folded configuration, one or more finger notches having a plurality of material removed from the bottom of the pen support to provide clearance adjacent to the leg cutout, a first hinge hingedly coupling the pen support to the base via the first hinge at a second end of the pen support and, a kickstand leg hingedly coupled to the pen support via a second hinge disposed at the top of the leg cutout. The base includes a fluted indentation running longitudinally on a top surface of the base. The pen support includes a pen notch at a first end of the pen support. The kickstand leg pivots in a third rotational direction to unfold the vape pen kickstand and pivots in a fourth rotational direction to fold the vape pen kickstand.

The first end of the base may be hingedly coupled to the pen support via the first hinge. The fluted indentation may have a plurality of lateral ridges is separated by a plurality of lateral troughs. Each of the lateral ridges may have a top that is at or below the top of the base. Each of the lateral troughs may have a bottom that is below the tops of the lateral ridges. The fluted indentation may extend longitudinally along the base between the first end of the base and a second end of the base. The fluted indentation may prevent an item from sliding along the base towards the second end of the base by capturing the item in a first individual trough. The item may be pushed towards the second end of the base and a first individual ridge adjacent to the first individual trough prevents movement of the item.

**2**

The pen support may pivot in a first rotational direction to unfold the vape pen kickstand and pivot in a second rotational direction to fold the vape pen kickstand. The mouthpiece end of the vaping pen may rest within the pen notch during use. The pen support may be a generally rectangular armature. The one or more finger notches may be adapted to provide clearance for the user’s finger to grasp the kickstand leg in order to pivot the kickstand leg. The kickstand leg may be a generally rectangular armature that is hingedly coupled to the pen support at a first end of the leg.

The kickstand leg may pivot into the leg cutout of the pen support for storage and pivot away from the pen support during use. The vape pen kickstand may be a folding stand for a vaping pen to rest upon when the vaping pen is not being held. The vape pen kickstand may be unfolded to a fully unfolded configuration to hold the vaping pen. The vape pen kickstand may retain the vaping pen in an upright orientation such that a plurality of vaping oil is prevented from leaking out of the vaping pen. The vape pen kickstand may be folded flat to facilitate transport. The vape pen kickstand may be positioned within the leg cutout of the pen support and the pen support is positioned parallel to the base. The vape pen kickstand may be deployed by first pivoting the pen support to a partially unfolded configuration and then pivoting the kickstand leg to the fully unfolded configuration.

## BRIEF DESCRIPTION OF THE DRAWINGS

The advantages and features of the present invention will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:

FIG. 1 is a perspective view of a vape pen kickstand, according to an embodiment of the present invention illustrating the invention in the fully unfolded configuration;

FIG. 2 is a perspective view of a vape pen kickstand, according to an embodiment of the present invention illustrating the invention in the partially unfolded configuration;

FIG. 3 is a perspective view of a vape pen kickstand, according to an embodiment of the present invention illustrating the invention in the fully folded configuration;

FIG. 4 is a top view of a vape pen kickstand, according to an embodiment of the present invention;

FIG. 5 is a side view of a vape pen kickstand, according to an embodiment of the present invention;

FIG. 6 is a front view of a vape pen kickstand, according to an embodiment of the present invention; and

FIG. 7 is a rear view of a vape pen kickstand, according to an embodiment of the present invention.

## DESCRIPTIVE KEY

- 100 vape pen kickstand
- 200 base
- 202 fluted indentation
- 204 lateral trough
- 206 lateral ridge
- 208 first individual trough
- 210 first individual ridge
- 212 second individual trough
- 214 second individual ridge
- 216 first end of the base
- 218 second end of the base
- 230 pen support
- 232 pen notch

**234** leg cutout  
**236** first end of the pen support  
**238** second end of the pen support  
**240** finger notch  
**250** first hinge  
**260** kickstand leg  
**262** first end of the leg  
**264** second end of the leg  
**270** second hinge  
**280** fully folded configuration  
**282** partially unfolded configuration  
**284** fully unfolded configuration  
**290** first rotational direction  
**292** second rotational direction  
**294** third rotational direction  
**296** fourth rotational direction  
**900** vaping pen  
**902** mouthpiece end  
**904** battery end

#### DESCRIPTION OF THE INVENTION

The present invention is directed to a vape pen kickstand (herein described as the “invention”) **100**. The invention **100** may comprise a base **200**, a pen support **230**, a first hinge **250**, a kickstand leg **260**, and a second hinge **270**. The invention **100** may be a folding stand for a vaping pen **900** to rest upon when the vaping pen **900** is not being held. The invention **100** may be unfolded to a fully unfolded configuration **284** to hold the vaping pen **900**. The invention **100** may retain the vaping pen **900** in an upright orientation such that vaping oil is prevented from leaking out of the vaping pen **900**. The invention **100** may fold flat when not in use such that the invention **100** may be easily transported in a pocket or purse.

The invention **100** may be carried while folded into a fully folded configuration **280**. In the fully folded configuration **280**, the kickstand leg **260** may be positioned within a leg cutout **234** of the pen support **230** and the pen support **230** may be positioned parallel to the base **200**.

The invention **100** may be deployed by first pivoting the pen support **230** to a partially unfolded configuration **282** and by then pivoting the kickstand leg **260** to the fully unfolded configuration **284**.

The base **200** may be a generally rectangular armature that forms the bottom of the invention **100**. The base **200** may comprise a fluted indentation **202** running longitudinally on the top surface of the base **200**. A first end of the base **216** may hingedly couple to the pen support **230** via the first hinge **250**.

The fluted indentation **202** may comprise a plurality of lateral ridges **206** separated by a plurality of lateral troughs **204**. The fluted indentation **202** may extend longitudinally along the base **200** between the first end of the base **216** and a second end of the base **218**. The tops of the plurality of lateral ridges **206** may be at or below the height of the top of the base **200**. The bottoms of the plurality of lateral troughs **204** may be below the height of the tops of the plurality of lateral ridges **206**. The fluted indentation **202** may prevent an item from sliding along the base **200** towards the second end of the base **218** by capturing the bottom of the item in a first individual trough **208**. If the item is pushed towards the second end of the base **218**, a first individual ridge **210** adjacent to the first individual trough **208** may prevent movement of the item.

The pen support **230** may elevate a mouthpiece end **902** of the vaping pen **900** when the pen support **230** is pivoted

upwards away from the base **200**. The pen support **230** may be a generally rectangular armature. The pen support **230** may comprise a pen notch **232** at a first end of the pen support **236**. The mouthpiece end **902** of the vaping pen **900** may rest within the pen notch **232** during use. The pen support **230** may be hingedly coupled to the base **200** via the first hinge **250** at a second end of the pen support **238**. The pen support **230** may pivot in a first rotational direction **290** to unfold the invention **100** and may pivot in a second rotational direction **292** to fold the invention **100**.

The pen support **230** may comprise the leg cutout **234**. The leg cutout **234** may be an aperture on the second end of the pen support **238** such that the kickstand leg **260** may pivot into the leg cutout **234** when the invention **100** is in the fully folded configuration **280**. The kickstand leg **260** may be hingedly coupled to the pen support **230** via the second hinge **270** at the top of the leg cutout **234**. The kickstand leg **260** may pivot in a third rotational direction **294** to unfold the invention **100** and may pivot in a fourth rotational direction **296** to fold the invention **100**.

The pen support **230** may comprise one (1) or more finger notches **240**. The one (1) or more finger notches **240** may comprise material removed from the bottom of the pen support **230** to provide clearance adjacent to the leg cutout **234**. The one (1) or more finger notches **240** may be adapted to provide clearance for the user’s finger to grasp the kickstand leg **260** in order to pivot the kickstand leg **260**.

The kickstand leg **260** may be a generally rectangular armature that is hingedly coupled to the pen support **230** at a first end of the leg **262**. The kickstand leg **260** may pivot into the leg cutout **234** of the pen support **230** for storage and may pivot away from the pen support **230** during use. During use, a second end of the leg **264** may rest within the fluted indentation **202**.

The invention **100** may be operable to hold the vaping pen **900** when the invention **100** is in the fully folded configuration **280**, a battery end **904** of the vaping pen **900** is placed into one (1) of the plurality of lateral troughs **204**, and the mouthpiece end **902** of the vaping pen **900** is placed into the pen notch **232**. The second end of the leg **264** may rest within the first individual trough **208** and the first individual ridge **210** may prevent the kickstand leg **260** from sliding. The battery end **904** of the vaping pen **900** may rest within a second individual trough **212** and a second individual ridge **214** may prevent the vaping pen **900** from sliding.

In use, the invention **100** may be placed in the fully unfolded configuration **284** by pivoting the pen support **230** and the kickstand leg **260** and by placing the second end of the leg **264** into one of the plurality of lateral troughs **204**. The vaping pen **900** may be placed onto the invention **100** with the mouthpiece end **902** of the vaping pen **900** down, resting in one (1) of the plurality of lateral troughs **204**, and with the mouthpiece end **902** of the vaping pen **900** resting within the pen notch **232**. When no longer needed, the invention **100** may be folded into the fully folded configuration **280** for transport by pivoting the kickstand leg **260** and the pen support **230** to their original orientations.

The exact specifications, materials used, and method of use of the invention **100** may vary upon manufacturing. The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable

5

others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated.

What is claimed is:

1. A vape pen kickstand, comprising: a base having a first end and a generally rectangular armature that forms a vape pen kickstand bottom, the base includes a fluted indentation running longitudinally on a top surface of the base;

a pen support having a first end and a second end wherein the first end configured to support a vaping pen having a mouthpiece end; the pen support having a leg cutout for receiving a kickstand leg in a fully folded configuration;

the pen support elevating the mouthpiece end of the vaping pen when the pen support is pivoted upwards away from the base, the pen support includes a pen notch at the first end of the pen support; the leg cutout having an aperture on the second end of the pen support such that the kickstand leg pivots into the leg cutout when the vape pen kickstand is in the fully folded configuration; one or more finger notches having a plurality of material removed from a bottom of the pen support to provide clearance adjacent to the leg cutout; a first hinge hingedly coupling the pen support to the base via the first hinge at the second end of the pen support; and, the kickstand leg hingedly coupled to the pen support via a second hinge disposed at a top of the leg cutout, the kickstand leg pivots in a first rotational direction to unfold the vape pen kickstand and pivots in a second rotational direction to fold the vape pen kickstand.

2. The vape pen kickstand, according to claim 1, wherein the first end of the base is hingedly coupled to the pen support via the first hinge.

3. The vape pen kickstand, according to claim 1, wherein the fluted indentation having a plurality of lateral ridges is separated by a plurality of lateral troughs.

4. The vape pen kickstand, according to claim 3, wherein each of the lateral ridges have a top that is at or below the top of the base.

5. The vape pen kickstand, according to claim 3, wherein each of the lateral troughs have a bottom that is below the tops of the lateral ridges.

6. The vape pen kickstand, according to claim 1, wherein the fluted indentation extends longitudinally along the base between the first end of the base and a second end of the base.

6

7. The vape pen kickstand, according to claim 1, wherein the fluted indentation prevents the vaping pen from sliding along the base towards the second end of the base by capturing the item in a first individual trough.

8. The vape pen kickstand, according to claim 7, wherein the item is pushed towards the second end of the base and a first individual ridge adjacent to the first individual trough prevents movement of the item.

9. The vape pen kickstand, according to claim 1, wherein the pen support pivots in a first rotational direction to unfold the vape pen kickstand and pivot in a second rotational direction to fold the vape pen kickstand.

10. The vape pen kickstand, according to claim 1, wherein the mouthpiece end of the vaping pen rests within the pen notch during use.

11. The vape pen kickstand, according to claim 1, wherein pen support is a generally rectangular armature.

12. The vape pen kickstand, according to claim 1, wherein the one or more finger notches are adapted to provide clearance for the user's finger to grasp the kickstand leg in order to pivot the kickstand leg.

13. The vape pen kickstand, according to claim 1, wherein the kickstand leg is a generally rectangular armature that is hingedly coupled to the pen support at a first end of the leg.

14. The vape pen kickstand, according to claim 1, wherein the kickstand leg pivots into the leg cutout of the pen support for storage and pivot away from the pen support during use.

15. The vape pen kickstand, according to claim 1, wherein the vape pen kickstand is a folding stand for a vaping pen to rest upon when the vaping pen is not being held.

16. The vape pen kickstand, according to claim 15, wherein the vape pen kickstand is unfolded to a fully unfolded configuration to hold the vaping pen.

17. The vape pen kickstand, according to claim 1, wherein the vape pen kickstand retains the vaping pen in an upright orientation such that a plurality of vaping oil is prevented from leaking out of the vaping pen.

18. The vape pen kickstand, according to claim 1, wherein the vape pen kickstand is folded flat to facilitate transport.

19. The vape pen kickstand, according to claim 1, wherein the vape pen kickstand leg is positioned within the leg cutout of the pen support and the pen support is positioned parallel to the base when in a collapsed position.

20. The vape pen kickstand, according to claim 1, wherein the vape pen kickstand is deployed by first pivoting the pen support to a partially unfolded configuration and then pivoting the kickstand leg to the fully unfolded configuration.

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